

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A frequency multiplexer for switching between frequency bands comprising:
 - a plurality of circuits, connected to a common terminal, wherein each of the circuits comprises:
 - a filter; and a device connected to the filter,
wherein
 - the device has first and second states;
 - each circuit has a first filter characteristic that passes a first frequency band and substantially blocks a second frequency band when the device is in the first state;
 - each circuit has a second filter characteristic which substantially blocks the first and second frequency bands when the device is in the second state, wherein the second filter characteristic is a result of the device and the filter acting in combination; and
 - a controller that selectively places each said device in the first state or the second state, wherein one of the plurality of circuits is conducting signals of the first frequency band the controller places each remaining device of the plurality of circuits in the second state.
 2. (Cancelled)

3. (Previously Amended) The frequency multiplexer of claim 1 wherein the controller comprises a plurality of individual controllers, each for controlling the device of a corresponding one of the circuits.

4. (Previously Amended) The frequency multiplexer of claim 1 wherein each said device comprises:

a switch device; and an element.

5. (Original) The frequency multiplexer of claim 4 wherein said element is a capacitor.

6. (Original) The frequency multiplexer of claim 4 wherein said switch device is a diode.

7. (Original) The frequency multiplexer of claim 6 wherein each diode is a PIN diode.

8. (Previously Amended) The frequency multiplexer of claim 1 wherein each said second frequency band of said plurality of circuits is a same frequency band.

9. (Original) The frequency multiplexer of claim 8 further comprising:
an alternate circuit having a filter and a filter characteristic that passes each said second frequency band of said plurality of circuits and substantially blocks each said first frequency band of said plurality of circuits.

10. (Original) The frequency multiplexer of claim 9 wherein said controller places each said device into the first state when the alternate circuit is conducting signals of the second frequency band.

11. (Original) The frequency multiplexer of claim 1 wherein each filter comprises:
 - a first inductor connected in series with a filter capacitor; and
 - a second inductor connected in parallel with both the first inductor and the filter capacitor.
12. (Original) The frequency multiplexer of claim 11 wherein each device comprises:
 - a first capacitor connected in series with a switch device, wherein the switch device and the first capacitor are connected in parallel with the first inductor.
13. (Original) The frequency multiplexer of claim 12 wherein each switch device is a diode.
14. (Original) The frequency multiplexer of claim 13 wherein each diode is a PIN diode.
15. (Original) The frequency multiplexer of claim 1 wherein each of the first frequency bands is a high frequency band and each of the second frequency bands is a low frequency band.
16. (Original) A method for switching between frequency bands comprising the steps of:
 - selecting an active circuit from a plurality of circuits, wherein each circuit is connected to a common terminal, each circuit has a first filter characteristic that passes a first frequency band and substantially blocks a second frequency band when a device is in the first state, and
 - each circuit has a second filter characteristic which substantially blocks the first and second frequency bands when the device is in the second state,

wherein the second filter characteristic is a result of the device and a filter acting in combination;

setting the device of the active circuit into the first state; and

setting the devices of all non-selected circuits into a second state.

17. (Original) The method of claim 16 further comprising the step of:
conducting a signal through the active circuit, wherein the signal is of the first frequency band of the active circuit.